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## RAW SEQUENCE LISTING

DATE: 09/17/2004

PATENT APPLICATION: US/10/733,532

TIME: 11:52:52

Input Set : A:\sequencelisting.txt

Output Set: N:\CRF4\09172004\J733532.raw

3 <110> APPLICANT: Sale, Julian E.  
 4       Neuberger, Michael S.  
 5       Cumbers, Sarah J.  
 7 <120> TITLE OF INVENTION: Method of Generating Diversity  
 9 <130> FILE REFERENCE: 18396/2002B  
 11 <140> CURRENT APPLICATION NUMBER: 10/733,532  
 12 <141> CURRENT FILING DATE: 2003-12-11  
 14 <150> PRIOR APPLICATION NUMBER: PCT/GB02/02688  
 15 <151> PRIOR FILING DATE: 2002-06-11  
 17 <150> PRIOR APPLICATION NUMBER: 10/146,505  
 18 <151> PRIOR FILING DATE: 2002-05-15  
 20 <150> PRIOR APPLICATION NUMBER: 09/879,813  
 21 <151> PRIOR FILING DATE: 2001-06-11  
 23 <160> NUMBER OF SEQ ID NOS: 130  
 25 <170> SOFTWARE: PatentIn version 3.2  
 27 <210> SEQ ID NO: 1  
 28 <211> LENGTH: 24  
 29 <212> TYPE: DNA  
 30 <213> ORGANISM: Artificial  
 32 <220> FEATURE:  
 33 <223> OTHER INFORMATION: Primer  
 35 <400> SEQUENCE: 1  
 36 gcggtacctg aggagacggt gacc  
 39 <210> SEQ ID NO: 2  
 40 <211> LENGTH: 30  
 41 <212> TYPE: DNA  
 42 <213> ORGANISM: Artificial  
 44 <220> FEATURE:  
 45 <223> OTHER INFORMATION: primer  
 47 <400> SEQUENCE: 2  
 48 ccccaagctt cccaggtgca gctacagcag  
 51 <210> SEQ ID NO: 3  
 52 <211> LENGTH: 30  
 53 <212> TYPE: DNA  
 54 <213> ORGANISM: Artificial  
 56 <220> FEATURE:  
 57 <223> OTHER INFORMATION: primer  
 59 <400> SEQUENCE: 3  
 60 ccccggtacc agatgagctt ggacttgagg  
 63 <210> SEQ ID NO: 4  
 64 <211> LENGTH: 35  
 65 <212> TYPE: DNA  
 66 <213> ORGANISM: Artificial

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**ENTERED**

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68 <220> FEATURE:
69 <223> OTHER INFORMATION: Primer
71 <400> SEQUENCE: 4
72 ccccaagctt cgggagtgca tccgccccaa ccctt 35
75 <210> SEQ ID NO: 5
76 <211> LENGTH: 30
77 <212> TYPE: DNA
78 <213> ORGANISM: Artificial
80 <220> FEATURE:
81 <223> OTHER INFORMATION: primer
83 <400> SEQUENCE: 5
84 ccccaagctt ccagctctgc cctgactcag 30
87 <210> SEQ ID NO: 6
88 <211> LENGTH: 30
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial
92 <220> FEATURE:
93 <223> OTHER INFORMATION: primer
95 <400> SEQUENCE: 6
96 cccctctaga ccacctagga cggtcagctt 30
99 <210> SEQ ID NO: 7
100 <211> LENGTH: 29
101 <212> TYPE: DNA
102 <213> ORGANISM: Artificial
104 <220> FEATURE:
105 <223> OTHER INFORMATION: primer
107 <400> SEQUENCE: 7
108 ggactgcagt caggttcagt ggcagtggg 29
111 <210> SEQ ID NO: 8
112 <211> LENGTH: 31
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial
116 <220> FEATURE:
117 <223> OTHER INFORMATION: primer
119 <400> SEQUENCE: 8
120 caggagctcg cggggccgctc actgattgcc g 31
123 <210> SEQ ID NO: 9
124 <211> LENGTH: 34
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial
128 <220> FEATURE:
129 <223> OTHER INFORMATION: primer
131 <400> SEQUENCE: 9
132 gcgcaagctt cccagcctg ccgccaagtc caag 34
135 <210> SEQ ID NO: 10
136 <211> LENGTH: 26
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial
140 <220> FEATURE:

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141 <223> OTHER INFORMATION: primer
143 <400> SEQUENCE: 10
144 ggaattctca gtgggagcag gagcag 26
147 <210> SEQ ID NO: 11
148 <211> LENGTH: 27
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial
152 <220> FEATURE:
153 <223> OTHER INFORMATION: primer
155 <400> SEQUENCE: 11
156 cgggagctcc gtcagcgctc tctgtcc 27
159 <210> SEQ ID NO: 12
160 <211> LENGTH: 29
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial
164 <220> FEATURE:
165 <223> OTHER INFORMATION: primer
167 <400> SEQUENCE: 12
168 ggggtaccgc gaggagacga tgacttcgg 29
171 <210> SEQ ID NO: 13
172 <211> LENGTH: 23
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial
176 <220> FEATURE:
177 <223> OTHER INFORMATION: primer
179 <400> SEQUENCE: 13
180 gcagttcaag aattcctcgc tgg 23
183 <210> SEQ ID NO: 14
184 <211> LENGTH: 24
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial
188 <220> FEATURE:
189 <223> OTHER INFORMATION: primer
191 <400> SEQUENCE: 14
192 ggagccatcg atcacccaat ccac 24
195 <210> SEQ ID NO: 15
196 <211> LENGTH: 341
197 <212> TYPE: DNA
198 <213> ORGANISM: Homo sapiens
201 <220> FEATURE:
202 <221> NAME/KEY: misc_feature
203 <222> LOCATION: (1)..(341)
205 <400> SEQUENCE: 15
206 tggggcgag gactgttgaa gccttcggag accctgtccc tcacctgcgg tgtttatggg 60
208 gggtccttca gtggttacta ctggagctgg atccgccagc cccagggaa ggggctggag 120
210 tggattgggg aaatcaatca tagtgggaag accaactaca acccgtcct caagagtcga 180
212 gtcaccatat cagtagacac gtccaagaag cagctctccc tgaagttgag ctctgtgaac 240
214 gccgcggaca cggtgtgta ttactgtgcg agagttatta ctagggcgag tcctggaaca 300
216 gacgggaggt acggtatgga cgtctggggc caagggacca c 341

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219 <210> SEQ ID NO: 16
220 <211> LENGTH: 12
221 <212> TYPE: DNA
222 <213> ORGANISM: Homo sapiens
225 <220> FEATURE:
226 <221> NAME/KEY: misc_feature
227 <222> LOCATION: (7)..(7)
228 <223> OTHER INFORMATION: A62
229     Sequence 'tcag tgg' is deleted
231 <400> SEQUENCE: 16
232 ggtcctttac ta                                     12
235 <210> SEQ ID NO: 17
236 <211> LENGTH: 12
237 <212> TYPE: DNA
238 <213> ORGANISM: Homo sapiens
241 <220> FEATURE:
242 <221> NAME/KEY: misc_feature
243 <222> LOCATION: (7)..(7)
244 <223> OTHER INFORMATION: A 120
245     Nucleotide 'T' at position 7 is deleted
247 <400> SEQUENCE: 17
248 gtggatgggg aa                                     12
251 <210> SEQ ID NO: 18
252 <211> LENGTH: 12
253 <212> TYPE: DNA
254 <213> ORGANISM: Homo sapiens
257 <220> FEATURE:
258 <221> NAME/KEY: misc_feature
259 <222> LOCATION: (7)..(7)
260 <223> OTHER INFORMATION: A276
261     Nucleotides TGTGNNNNNNNNNNNNNNNNNTACT are deleted
262     N = nucleotides A, T, G or C
264 <400> SEQUENCE: 18
265 tattacaggg cg                                     12
268 <210> SEQ ID NO: 19
269 <211> LENGTH: 12
270 <212> TYPE: DNA
271 <213> ORGANISM: Homo sapiens
274 <220> FEATURE:
275 <221> NAME/KEY: misc_feature
276 <222> LOCATION: (7)..(7)
277 <223> OTHER INFORMATION: A306
278     Nucleotide 'C' at position 7 is deleted
280 <400> SEQUENCE: 19
281 gaggtaggta tg                                     12
284 <210> SEQ ID NO: 20
285 <211> LENGTH: 11
286 <212> TYPE: DNA
287 <213> ORGANISM: Homo sapiens

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290 <220> FEATURE:
291 <221> NAME/KEY: misc_feature
292 <222> LOCATION: (7)..(7)
293 <223> OTHER INFORMATION: B93
294     Nucleotide G at position 7 is deleted
296 <400> SEQUENCE: 20
297 ccgccacccc a                                     11
300 <210> SEQ ID NO: 21
301 <211> LENGTH: 11
302 <212> TYPE: DNA
303 <213> ORGANISM: Homo sapiens
306 <220> FEATURE:
307 <221> NAME/KEY: misc_feature
308 <222> LOCATION: (7)..(7)
309 <223> OTHER INFORMATION: B98
310     Nucleotide 'C' at position 7 is deleted
312 <400> SEQUENCE: 21
313 agcccagggg a                                     11
316 <210> SEQ ID NO: 22
317 <211> LENGTH: 12
318 <212> TYPE: DNA
319 <213> ORGANISM: Homo sapiens
322 <220> FEATURE:
323 <221> NAME/KEY: misc_feature
324 <222> LOCATION: (7)..(7)
325 <223> OTHER INFORMATION: B227
326     The sequence 'CTGTG' is deleted
328 <400> SEQUENCE: 22
329 tgagctaacg cc                                     12
332 <210> SEQ ID NO: 23
333 <211> LENGTH: 12
334 <212> TYPE: DNA
335 <213> ORGANISM: Homo sapiens
338 <220> FEATURE:
339 <221> NAME/KEY: misc_feature
340 <222> LOCATION: (7)..(7)
341 <223> OTHER INFORMATION: C82
342     The sequence TGGA.37bp.GAGT is deleted
344 <400> SEQUENCE: 23
345 tggagtggat tg                                     12
348 <210> SEQ ID NO: 24
349 <211> LENGTH: 12
350 <212> TYPE: DNA
351 <213> ORGANISM: Homo sapiens
354 <220> FEATURE:
355 <221> NAME/KEY: misc_feature
356 <222> LOCATION: (7)..(7)
357 <223> OTHER INFORMATION: C209
358     The sequence 'tctt ccctgaagtt' is deleted

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/733,532

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Input Set : A:\sequencelisting.txt  
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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:31; N Pos. 18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37  
Seq#:31; N Pos. 38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57  
Seq#:31; N Pos. 58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77  
Seq#:31; N Pos. 78,79,95,96,97,98,99,100,101,102,103,104,105,106,107,108  
Seq#:31; N Pos. 109,110,111,112,113,114,115,116,117,118,119,120,121,122,123  
Seq#:31; N Pos. 124,125,126,127,128,129,130,131,132,133,134,135,136,137,138  
Seq#:31; N Pos. 139,140,141,142,143,144,145,146,147,148,149,150,151,152,153  
Seq#:31; N Pos. 154,155,156  
Seq#:48; N Pos. 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28  
Seq#:48; N Pos. 29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48  
Seq#:48; N Pos. 49,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76  
Seq#:48; N Pos. 77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94  
Seq#:50; N Pos. 9,10,11,12,13,14,15,16,17,18,27,28,29,30,31,32,33,34,35,36  
Seq#:52; N Pos. 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28  
Seq#:52; N Pos. 29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48  
Seq#:52; N Pos. 49,50,51,52,53,54,55,56,57,58,70,71,72,73,74,75,76,77,78,79  
Seq#:52; N Pos. 80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99  
Seq#:52; N Pos. 100,101,102,103,104,105,106,107,108,109,110,111,112,113,114  
Seq#:52; N Pos. 115,116,117,118,119

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14

## VERIFICATION SUMMARY

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Input Set : A:\sequencelisting.txt

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L:487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
L:489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:60  
L:491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:120  
L:784 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0  
L:786 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60  
L:830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0  
L:875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0  
L:877 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:60